

MANAGING SURGES IN CAPITAL INFLOWS: THE PHILIPPINE CASE*

Mario B. Lamberte

I INTRODUCTION

"Life isn't fair to central bankers in developing countries. Liberalise your economy, encourage foreign investment and before you know it, you're in trouble. Capital from abroad crashes onto your shores with the unforeseen force of a *tsunami*, and the resulting flood of money threatens rising inflation. If you're not careful, your reputation washes away in the undertow" (*Far Eastern Economic Review*, 10 November 1994). *The Economist's* latest edition also devoted an article to the same topic. It compares the performance of Latin American countries, represented by Argentina, Chile, Brazil and Mexico, and Asian countries, represented by Indonesia, Malaysia and Thailand, in managing capital inflows. Earlier, the IMF published an article written by Schadler et al. (1993) which reviews the experiences of six countries, namely, Chile, Colombia, Egypt, Mexico, Spain and Thailand, that have had recent surges in capital inflows. At about the same time, the World Bank circulated a discussion paper entitled "Portfolio Investment in Developing Countries" edited by Claessens and Gooptu which put together several articles presented in a conference in 1993 that examine the issues, trends and policy implications for developing countries of portfolio capital inflows. The ADB's *Asian Development Review* (Vol. 11, No. 1, 1993) devoted one issue to the topic of foreign direct investments and portfolio investment in Asian and Pacific economies.

*This is part of the PIDS Review and Outlook of the Philippine Economy (PROPE) Project.

These are just a few examples of popular articles and in-depth studies that try to bring to the attention of the general public the opportunities (e.g., relaxation of capital constraint) and problems (e.g., increased inflationary pressure, real exchange rate appreciation, deterioration in the current account) associated with surges in foreign capital recently experienced by newly opened economies of developing countries. Indeed, capital inflows can be likened to a pill that can cure a particular disease but produces some side-effects which, if not immediately contained, can kill the patient.

The main message of the existing studies on capital inflows is clear: **A country cannot claim success with its liberalization program when foreign capital starts coming in; only when it is able to minimize the destabilizing effects and maximize the positive effects of capital inflows on investment and growth can it claim unqualified success.**

The Philippines is one of the countries in Southeast Asia that has recently experienced surges in capital inflows. As a latecomer in this area, it has the advantage of having drawn lessons from the experience of Latin American and Asian countries which encountered surges in capital inflows much earlier, thus avoiding the undesirable effects of such inflows that threaten economic stability.

The next section provides a background of the magnitude and characteristics of capital flows to developing economies and discusses some issues associated with such flows. The third section analyzes the trends, causes and policy implications of surges in foreign exchange inflows in the Philippines during the period 1986-1994. The last section concludes the study. **The main conclusion that can be drawn from the results of the analysis is that the management of surges in capital inflows in the Philippines still leaves much to be desired. In particular, full sterilization by the Bangko Sentral ng Pilipinas (BSP) to meet certain monetary targets under the International Monetary Fund (IMF)-sponsored stabilization program deprived the country of the chance to exact more benefits in terms of higher investment and growth from the foreign exchange inflows.**

II

SURGES IN FOREIGN CAPITAL TO DEVELOPING ECONOMIES

If unrestricted, capital normally goes to where returns are highest. It may leave the area for awhile when disturbances occur, but it always comes back once everything settles. Interestingly, capital may come and go in various forms. In the 1970s, huge amounts of petrodollars were recycled to developing economies by banks in the form of loans. This partly relaxed the capital constraint faced by developing countries. Unfortunately, an unprecedented world debt crisis struck in the early 1980s, resulting in a slowdown in bank lending to developing countries. When the world debt crisis settled toward the second half of the 1980s, capital went back to some developing countries, particularly those that have liberalized their economies, this time largely in the form of portfolio investments. According to Howell (1993), this phenomenon is not new. Toward the late 19th century, "funds left the mature markets of Europe in search of higher returns in the new, emerging world of the Americas and Asia-Pacific." He hypothesizes that the world is presently undergoing one phase of an eight-phase capital flow cycle.¹

1. "... the earliest stage of economic development (phase 1) is likely to attract public or private sector bond finance or high-risk equity finance from foreign investors; this, in turn, might precipitate subsequent inflows of direct investment (phase 2) and banking capital (phase 3). Next, economic 'take-off' is likely to attract increasing amounts of portfolio equity capital (phase 4), and may involve local firms listing their securities in foreign stock markets.

"....Increasing economic development will raise levels of wealth and may lead to high net-worth individuals (for example, successful entrepreneurs) investing in foreign security markets (phase 6), and, second, foreign lending by banks (phase 7). The final phase of net capital outflow is dominated by the large pension, insurance and mutual funds that characterize late capitalism (phase 8)" (p. 80).

Portfolio flows to developing countries grew geometrically in the last five years, from US\$7.5 billion in 1989 to US\$55.8 billion in 1993. A large chunk of the portfolio flows went to Latin America and the Caribbean and East Asia and Pacific countries (Table 1). Indeed, the magnitude and rapid growth of such flows cannot escape the attention of both the public and private sectors.

As the saying goes: "It takes two to tango." The portfolio flows have been facilitated by certain developments in both developing and developed countries. Toward the second half of the 1980s, many developing countries started to substantially liberalize their economies. In particular, regulations on foreign investment, capital market and foreign exchange market have been relaxed. In addition, a number of large, highly profitable government corporations in developing economies were privatized. At the same time, macroeconomic management in developing countries considerably improved, providing a good environment for stable growth, which is very important to foreign investors. The reforms have been regarded to be credible by both local and foreign investors. For highly indebted countries, the decline in international interest rates and successful

Table 1
PORTFOLIO FLOWS TO DEVELOPING COUNTRIES, BY REGION
(In US\$ billion)

	1989	1990	1991	1992	1993p
East Asia and Pacific	2.88	3.14	4.04	10.00	15.92
Europe and Central Asia	2.30	1.91	0.80	5.17	9.22
Latin America and the Caribbean	1.39	3.77	14.96	20.47	27.20
Global investment funds	0.08	0.04	0.25	0.14	2.64
Other regions	0.86	0.47	0.22	0.93	0.82
All developing countries	7.52	9.33	20.27	36.71	55.79

P = projected

Source: Claessens and Gooptu (1994).

restructuring programs greatly eased their burden in servicing external debt, and the savings derived therefrom were used to finance the adjustment.

The liberalization and the return to positive growth of the economies of developing countries have provided fund managers in developed countries with some opportunity to diversify further their portfolio. This international diversification of portfolio has been facilitated partly by recent regulatory changes in developed economies. In the US, for instance, the change in standards for corporate accounting in 1985 encouraged corporations to diversify the risk of exposure of their pension funds. Likewise, Canada, Japan and several European countries relaxed restrictions on international investing by pension funds to increase returns on their portfolios to cover partly unfunded liabilities. This occurred at a time when interest rates on fixed-income instruments in developed economies were falling and were far less than those being offered by newly opened economies. Also, price-earnings ratios were generally low in newly opened markets, suggesting the existence of unexploited profit opportunities. As Table 2 shows, price-earning ratios of 11 emerging markets increased more than those of New York between 1986 and 1991, indicating that capital surplus countries wasted no time in investing in emerging markets to capture some of those unexploited profit opportunities.

Results of empirical studies confirm the benefits expected from international diversification of portfolio. With regard to investment in stocks, for instance, Greenwood (1993) estimated that "with a 60 percent U.S. and 40 percent Far East ex-Japan portfolio, returns can be increased by nearly 1.5 percent per annum for the same level of risk, or alternatively, with an 80 percent U.S. and 20 percent Far East ex-Japan portfolio, returns can be raised by 0.75 percent per annum while risk can be reduced."

Table 2
MARKET PRICE-EARNINGS RATIOS, 1986-1991

	1986	1987	1988	1989	1990	1991	1991/ 1986
Emerging Markets							
Argentina	15.99	3.76	11.30	22.14	3.11	38.89	2.43
Brazil	4.24	15.38	7.95	8.30	5.34	7.65	1.80
Chile	5.27	5.00	4.40	5.82	8.86	17.38	3.30
Colombia	8.26	11.63	8.75	6.96	10.66	26.08	3.16
Greece	—	30.54	10.59	24.30	26.23	10.43	0.34*
India	18.02	22.05	21.51	18.34	20.59	13.85	0.77
Indonesia	—	—	—	—	30.84	26.66	—
Jordan	12.94	12.76	17.30	14.93	8.15	10.62	0.82
Korea	25.66	21.70	39.51	38.57	21.48	17.57	0.68
Malaysia	32.72	30.74	24.14	30.75	23.01	14.56	0.44
Mexico	10.52	6.23	5.04	10.66	13.20	24.36	2.32
Nigeria	5.84	4.94	6.07	6.99	7.01	9.74	1.67
Pakistan	8.22	6.85	9.37	8.44	8.53	23.87	2.90
Philippines	4.40	8.90	9.92	18.50	24.51	16.23	3.69
Portugal	24.81	27.23	26.50	21.42	15.47	18.91	0.76
Taiwan	12.00	13.01	40.23	51.17	44.41	14.50	1.21
Thailand	12.46	10.51	12.62	23.07	10.90	17.16	1.38
Turkey	—	19.78	2.62	17.64	22.50	21.60	1.09**
Venezuela	9.43	16.91	11.45	6.44	29.31	30.50	3.23
Zimbabwe	4.20	7.04	4.24	7.00	12.01	8.35	1.99
Developed Markets							
New York	16.77	15.41	12.19	14.70	15.19	21.85	1.30
Tokyo	47.30	58.30	58.40	70.60	39.80	37.80	0.80

* For Greece and Turkey, ratio is 1991/1987.

** The price-earning ratio is the ratio of end-of-month price to trailing.

Source: Buckberg (1993).

The characteristics of the recent capital flows to developing economies are different from those in the 1970s. *First*, funds for the recent capital flows come from various institutional investors (pension funds, mutual funds, insurance companies, etc.) and high net-worth individuals, whereas in the 1970s, the capital flows were provided mostly by a few banks. Greater diversification of the sources of capital reduces the risk of simulated slow-down or withdrawal of foreign capital. *Second*, the portfolio flows go to the developing countries in various forms, such as debt instruments (bonds, commercial papers, certificates of deposits), direct equity investment, deposit receipts and country funds, whereas in the 1970s, most of the capital flows were in the form of bank loans. Although debt instruments dominate, other forms of portfolio investments are by no means insignificant (Table 3). *Third*, the recent capital flows are being channelled to private borrowers that are subject to market discipline, whereas in the 1970s, most of the loans went to the public sector. It is therefore to be expected that foreign capital will be used more efficiently by capital-receiving countries. *Fourth*, with portfolio investments, risk is shared between capital providers and users, unlike in the 1970s when most of the risks were shifted to borrowers.

Table 3
PORTFOLIO FLOWS TO DEVELOPING COUNTRIES, BY INSTRUMENT
(In US\$ Billion)

	1989	1990	1991	1992	1993p
Bonds, CPs and CDs	4.0	5.5	12.7 2	3.7	42.6
Direct equity investment	1.3	0.8	1.5	5.8	3.2
Deposit receipts	0.0	0.1	4.9	5.9	7.3
Country funds	2.2	2.9	1.2	1.3	2.7
Total	7.5	9.3	20.3	36.7	55.8

P = projected

Source: Claessens and Gooptu (1994).

One issue that has been raised is whether the portfolio inflows to developing countries will continue in the future. This depends on the growth in assets of major markets, which partly determines the institutional investors' growth in nondomestic investment, and the sustainability of the economic growth of capital-receiving countries.² Many analysts are optimistic about the growth in assets of major markets. Davanzo and Katz (1992) estimated that pension assets in major markets will grow by about 10 percent per annum between 1990 and 2000, with Japan and Continental Europe leading the pack (Table 4). Institutional investors have just started investing in emerging markets, which could still be increased in the near future. Agtmael (1993) pointed out that emerging markets are still underweighted by most investors. They account for only 0.1 percent of institutional funds, well below the 7 percent weight of their market capitalization within world markets and the 13 percent of non-US market capitalization. Howell (1993) estimated that under various assumptions, foreign capital flows into the emerging markets will be between US\$13 billion and US\$27 billion annually during the period 1992-2010 (Table 5). This is a staggering amount of resources that can substantially relax the capital constraint, which many developing countries currently face.

Although there is so much optimism in the air about the sustainability of capital inflows, particularly portfolio investment, into the developing countries in the next two decades, much is demanded from developing countries in terms of good macroeconomic management and expansion of their absorptive capacities so that they can realize and fully maximize the benefits from the expected capital inflows. This is because foreign capital inflows, irrespective of form, beget some macroeconomic imbalances that can be magnified, if not

2. Greenwood (1993) found a positive correlation in the long term between economic growth and stock market returns.

Table 4
ESTIMATED PENSION ASSETS IN MAJOR MARKETS, 1990-2000
(In US\$ billion)

Country	1990	% of Total	2000	% of total	Projected growth rate (%)
United States	2,000	50	4,700	44	9
Corporate	975	49			
Public	905	45			
Other	120	6			
Canada	165	4	425	4	10
Corporate	60	35			
Public	105	65			
United Kingdom	460	11	1,200	11	10
Corporate	320	70			
Public	140	30			
Continental EC	415	10	1,300	13	12
Corporate	n/a	n/a			
Public	n/a	n/a			
Japan	965	24	3,000	28	12
Corporate	245	25			
Public	720	75			
TOTAL	4,005	100	10,625	100	10

Source: Davanzo and Katz (1992).

properly handled, and can negate initial gains realized by capital-receiving countries. The theoretical underpinning of this statement is well-laid down in Corbo and Hernandez (1993).

Capital inflows tend to increase liquidity in the system, which brings down domestic interest rates, which, in turn, stimulate domestic expenditures. Part of the increased level of domestic expenditures will go to the tradable goods and another part to the nontradable goods. Expenditures on tradable goods enlarge the trade balance

Table 5
FUTURE FLOWS—REQUIRED NET CROSS-BORDER PURCHASES
OF EMERGING MARKET EQUITY TO YEAR 2010
(In US\$ billion)

	1992A	1995E	2000E	2010E	Growth multiple	Required purchases net p.a.*
World market capitalization	10,257	13,652	21,987	57,028	5.6	
* Emerging markets	607					
as % of world total	5.9					
Investors' holdings of foreign equities	903	1342	2541	8554	9.5	
as % of world market cap	8.8	9.8	11.6	15.0		
LOW ESTIMATE						
Investors' holdings of emerging market equities assuming 10% target exposure	86	129	247	855	9.9	13
as % of total foreign equities	9.5	9.6	9.7	10.0		
as % of emerging market cap**		14.2	21.3	40.7	140.9	
HIGH ESTIMATE						
Investors' holdings of emerging market equities assuming 20% target exposure	86	151	360	1711	19.9	27
as a % of total foreign equities	9.5	11.3	14.2	20.0		
as % of emerging market cap**		14.2	24.9	59.3	281.9	

* Assuming that 70 percent of the increase comes from capital gains and 30 percent from net new money, as over the 1986-1992 period.

** Based on current market capitalization.

Source: Howell (1993).

deficit, which partly accommodates the foreign capital inflows. On the other hand, expenditures on nontradable goods result in an excess demand for nontradable goods at the existing relative price. This calls for an adjustment in the relative price in favor of nontradables to clear the market, which amounts to a real exchange rate appreciation. This, in turn, results in a reallocation of resources in favor of the nontradable sector. As Corbo and Hernandez pointed out, the final result of this adjustment "is a real appreciation, a larger nontradable sector, a smaller tradable sector, and a larger trade balance deficit." This, in effect, is the process of de-industrialization.

Although the price mechanism is at work to clear the market, the growing trade balance deficit may not be sustainable, especially if it is financed by portfolio investments, which are viewed to be more reversible than loans and direct foreign investments. Certain disturbances in the international capital market (e.g., a rise in interest rates in developed economies) or in the domestic economy of developing countries could quickly send capitals back to their respective home countries, especially under a deregulated foreign exchange market. Moreover, the volatility of portfolio investment would create more instability in domestic inflation and interest rates as well as in nominal and real exchange rates. Thus, it is argued that, when faced by rapid capital inflows, governments must intervene to smooth fluctuations in the real exchange rates and interest rates and in economic activity in general to avoid a balance-of-payments crisis. The cost of nonintervention could be high. The resulting real exchange rate appreciation could undermine the credibility of the export-oriented trade reforms already initiated by developing countries. On the other hand, the monetization of the inflows could lead to the loss of monetary control under a fixed exchange rate regime.

Williamson (1993) listed the following possible intervention measures that could be adopted by countries that are experiencing surges in foreign capital inflows:

- Encouragement of unsterilized intervention which will also result in the transfer being accomplished, though with a delay and with inflation rather than nominal appreciation producing the real appreciation;
- Pursuance of a contractionary fiscal policy, so as to reduce internal absorption and permit a reduction in interest rates that will reduce the incentive for an inflow of capital;
- Maintenance of controls on capital inflows, (e.g., variable deposit requirements against foreign borrowings) that can be resorted to when inflows become excessive;
- Engagement in sterilized intervention in an attempt to resist the transfer, with the risk that the market will ultimately overwhelm this attempt;
- Manipulation of the flow of domestic liquidity into the banking system using excess government savings, which may be regarded as a generalized form of sterilized intervention;
- Widening of band of permissible exchange rate fluctuations, so as to allow a temporary appreciation without undermining the confidence of exporters that the exchange rate will remain competitive in the medium term; and
- Elimination of any remaining subsidies to inward investment, such as free deposit insurance.

In practice, all countries that experienced surges in foreign capital inflows, particularly portfolio investment, have intervened to reduce, if not entirely eliminate, the unwanted effects of such inflows. As shown in Table 6, countries adopted certain measures in combination with other measures. However, not all of them were adopted at the same time. Some were introduced later to reinforce the desired effects of measures instituted earlier, while others were deemphasized despite continued capital inflows.

Table 6
MAJOR ECONOMIC MEASURES USED BY SAMPLE COUNTRIES

	Mexico	Chile	Colombia	Korea	Indonesia	Malaysia
Moves toward a more floating exchange rate (widening of the bank, limiting the use of swap facilities, pegging to a basket of currencies, etc.)	yes	yes			yes	
Fiscal restraint (inclusive of paying public foreign debt)	yes	yes		yes	yes	yes
Sterilization through open market operation	yes	yes	yes	yes		yes
Sterilization through other mechanisms (increase in banks' reserves, and in banks' capitalization rate, etc.)			yes		yes	yes
Restrictions on capital inflows (taxes to capital inflows, minimum reserve requirements on foreign loans, ceiling on foreign borrowing, etc.)	yes	yes		yes	yes	
Liberalization of the current account (tariff reduction, etc.)	yes	yes	yes		yes	yes
Capital outflow liberalization		yes	yes			

Source: Corbo and Hernandez (1993).

Most countries conducted aggressive sterilized intervention as the first line of defense against sudden, large capital inflows. However, as foreign capital continued to rise, sterilized intervention was de-emphasized for three reasons: (1) it involved high quasi-fiscal costs; (2) it quickly led to higher domestic interest rates, thereby attracting more short-term capital; and (3) it did not have potential benefits in terms of higher investment and growth which a less aggressive stance could generate. As Schadler et al. (1993) pointed out:

Sterilization — narrowly defined as the exchange of bonds for foreign exchange — is often effective in insulating an economy for short periods from some of the unwanted effects of surges in inflows. It is easy to implement quickly and, for several of the countries reviewed, appears to have prevented a widening of the current account deficit while locking in large increases in official reserves that limited countries' vulnerability to a reversal of the inflows. It appears to have been less effective in securing inflation targets and preventing real appreciations — probably owing to the large role of credibility and inflation expectations in these developments. Countries that sterilized most aggressively benefited least from the effects of inflows on investment and growth. Thus, aggressive sterilization is not appropriate when structural and fiscal changes that raise the profitability of investment are an important cause of the inflows.

Corbo and Hernandez share the same conclusions. They warn that the growing quasi-fiscal deficit of the Central Bank arising from its sterilized intervention can be the subject of speculative attack.

One issue that has been raised is the role of the fiscal sector in minimizing the effect of the surge in foreign capital inflows on the real exchange rate. If the government finances its purchases of the foreign exchange in the market through bond issuance, then it will

suffer the same fate as the Central Bank, which conducts sterilized intervention. It therefore suggests that the only way to avoid a real exchange appreciation resulting from the surges in capital inflows is for the fiscal sector to generate a surplus. However, this may be difficult to do, especially if the country lags far behind in infrastructure that is badly needed to expand its absorptive capacity. In their study, Schadler et al. (1993) found that "fiscal adjustment did not figure significantly in most countries' responses to inflows." However, this is not a prescription for having a loose fiscal policy.

III DEALING WITH SURGES IN CAPITAL INFLOWS: THE PHILIPPINE CASE

The surge in capital inflows currently being experienced by the Philippines is a result of external and internal factors. Since most of the external factors have already been discussed, this section, will focus on the internal factors that lead to a surge in capital inflows. It will also discuss the characteristics of the capital inflows and the measures adopted by the government to deal with the undesirable side-effects generated by the surge in capital inflows.

Major Reforms

Credibility in instituting economic reforms attracts the attention of foreign investors. This seems to be the biggest factor in attracting foreign capital into the country.

The government introduced major reforms in almost all areas of the economy during the period 1986-94 to improve the general economic environment, change the structure of the economy toward a more efficient and internationally competitive one, and build a firmer foundation for sustained growth. In the trade sector, the Philippines undertook a unilateral trade liberalization. Between 1986

and 1993, the number of regulated items was reduced from 1,924 items to 183. In 1991, the government embarked on a five-year tariff reduction. By 1995, the Philippines will have instituted a nine-band tariff structure, with items concentrated at 3, 10, 20 and 50 percent tariffs. Recently, tariff reductions in textiles, garments, and the industry's chemical inputs were accelerated.

In the fiscal sector, tax reforms were initiated in the second half of the 1980s to improve the elasticity of the tax system, promote equity by ensuring that similarly situated individuals and firms bore the same tax burden, promote growth by withdrawing or modifying taxes that impair incentives to produce, improve tax administration by simplifying the tax system, and promote tax compliance. One significant tax reform was the adoption of the Value Added Tax (VAT) that replaced several sales taxes. The expanded VAT system will soon be implemented by the government.

In the financial markets, the government promoted competition by removing controls on interest rates, rationalizing the government credit programs so as not to compete with private financial institutions, privatizing several government-controlled banks, and liberalizing the entry of new domestic banks and bank branching. Recently, a law was passed liberalizing the entry and scope of operations of foreign banks. Selective credit control was abandoned *de facto* when the Central Bank started to impose a uniform rediscounting policy for all economic activities.

The significant institutional reforms initiated in the financial markets include: (1) the creation of an independent Central Bank, (the *Bangko Sentral ng Pilipinas*), which is free from the burden of huge losses incurred by its predecessor; (2) the rehabilitation and strengthening of government-owned specialized banks; (3) the rehabilitation of the rural banking system; and (4) the weeding out of weak private commercial banks through closure, consolidation or merger. The new Central Bank Act strengthens the authority of the BSP to institute prudential regulations.

In the foreign exchange market, a substantial number of exchange controls such as the surrender requirement for export proceeds, prior BSP approval for export transactions, and payment on any forex transactions and for capital repatriation/dividend/interest remittance privilege have been removed in the last four years. Filipino nationals working overseas are no longer required to remit specified minimum shares of their earnings. However, some restrictions still remain with respect to foreign borrowing by private and public sectors, especially those guaranteed by the national government or government financial institutions.

At present, the exchange rate is freely determined in the market. The Bankers Association of the Philippines set up the Philippine Dealing System, which links participants through an electronic screen-based network for sharing information and undertaking foreign exchange transactions.

Four major policy reforms that have a direct bearing on capital market development have been introduced. *First*, the double taxation of dividend income was eliminated through the abolition of the tax on intercorporate dividends and the gradual phaseout of the tax on shareholder's dividend income. *Second*, the SEC formally issued in October 1989 the "Rules and Regulations Governing Investment Companies," signalling the revival of mutual funds. *Third*, as part of the foreign exchange deregulation program, rules and regulations covering foreign investments in Central Bank-approved securities have been relaxed. Under the new rules, some of the functions of the Central Bank have been downloaded to the custodian banks to reduce red tape. This means that a foreign investor can now immediately invest in CB-approved securities, unlike before when he would have waited several weeks for Central Bank approval. Foreign investments duly registered with the Central Bank or with a custodian bank duly designated by the foreign investor are now entitled to full and immediate capital repatriation. Without prior Central Bank approval, an authorized agent bank may sell and remit the equivalent foreign

exchange representing sales/divestment proceeds or dividends/interest of duly registered foreign investment. While waiting for reinvestment or repatriation, divestment proceeds of duly registered foreign investment as well as cash dividends, interest payments and divestment proceeds of stock dividends/splits may be lodged in interest earning deposits, whereas before they were allowed to be placed only in government securities, shares of stock of BOI-registered industries, and shares of stock in CB-certified export-oriented industries with prior Central Bank approval. Brokers have pointed out that transactions related to foreign investment in CB-approved securities can now be settled in three to four days compared to four to six months under the old rules and regulations. *Fourth*, the two stock exchanges in the Philippines have recently been unified, thereby eliminating some inefficiencies (e.g., price arbitrage) in the stock market by having two stock exchanges listing the same shares. All this facilitates the inflow of portfolio investment into the country.

As regards foreign investment, a foreign investment act was passed in 1991. It liberalizes the entry of foreign investors within the provisions of the Philippine Constitution. As a general rule, there are no restrictions on the extent of ownership of export enterprises (defined as those exporting at least 60 percent of their output). As for enterprises oriented to the domestic market, foreigners are allowed to invest as much as 100 percent, unless the participation is prohibited or limited to a smaller percentage by existing laws and/or the provisions of the foreign investment act.

As part of its competition policy, the government dismantled entry barriers that protected incumbent firms in key industries, such as telecommunications, land, sea and air transport, banking, and cement. This was complemented by an aggressive privatization program. In 1993 alone, the government privatized 19 government-owned or controlled corporations including several large ones, such as Petron, Philippine Shipyard and Engineering Corp., and Oriental Petroleum and Minerals Corp.

The reforms took time to yield positive results because of political uncertainty and major natural calamities during the period 1986-1990 which diverted much of the attention and resources of the country away from long-term structural issues. These reforms are far from being complete. In fact, the government is currently formulating several reform measures to reinforce and intensify further the reforms already put in place. For instance, the government has created a task force to formulate a program of rationalizing further the tax and fiscal incentive system to improve resource mobilization and, at the same time, reduce, if not eliminate, distortions created by the existing tax and fiscal incentive system. The progress in these reforms, albeit slow in some areas, lends credibility to the reforms.

External Shocks

Perhaps, what makes the Philippines different from other countries experiencing surges in capital inflows is that the foreign exchange inflows came from both the capital account and the nonmerchandise component of the current account which exerted pressure on money supply and the exchange rate.

Capital account. Foreign capital inflows increased rapidly, both in absolute terms and as a percentage of GNP from 1986 through the first semester of 1994, except the years 1990 and 1992 (Table 7). In 1993, capital inflows amounted to about 4 percent of GNP, which is well above the 0.3 percent of GNP in 1986. Direct investments provided much of the impetus up until 1989. Thereafter, medium- and long-term loans contributed a significant amount to the capital inflows as the government intensified its efforts to secure bilateral and multilateral official development assistance. This was also bolstered by the successful issuance of medium-term bonds by some government and private corporations in the international markets in 1993, amounting to US\$865 million. This is important to the Philippines since it signals the return of the country to the

international private capital market. All this suggests that a large component of the recent surges in foreign capital inflows into the Philippines are medium- and long-term capitals, which cannot be quickly reversed in the short term.

The two important components of direct investments are net new investments (i.e., new foreign investments minus capital withdrawn from the Philippines) and net portfolio investments (i.e., portfolio investment inflows minus portfolio investment outflows). Net new foreign investments were either close to zero or negative during the period 1986-94 (Table 8). In fact, they were severely negative in the last three years. In contrast, net portfolio investment increased dramatically from US\$13 million in 1986 to US\$855 million in 1993, or from close to zero percent to 1.7 percent of GNP. The figures for the first semester of 1994 seem to suggest that net portfolio investment will have another significant increase for the entire year. The sudden surge in net portfolio investment occurred in 1989, the year when the First Philippine Fund was listed in the New York Stock Exchange. It was not, however, sustained in the next two years because of political and economic instability, brought about by the failed coup d'état in December 1989, the series of major calamities that struck the country, and the Gulf War. The return to political stability starting in 1991 and the expected recovery of the economy in succeeding years as a result of the reforms attracted more portfolio investment. There is no question that the return of the Philippines to the international private capital markets helped attract portfolio investments to the country.

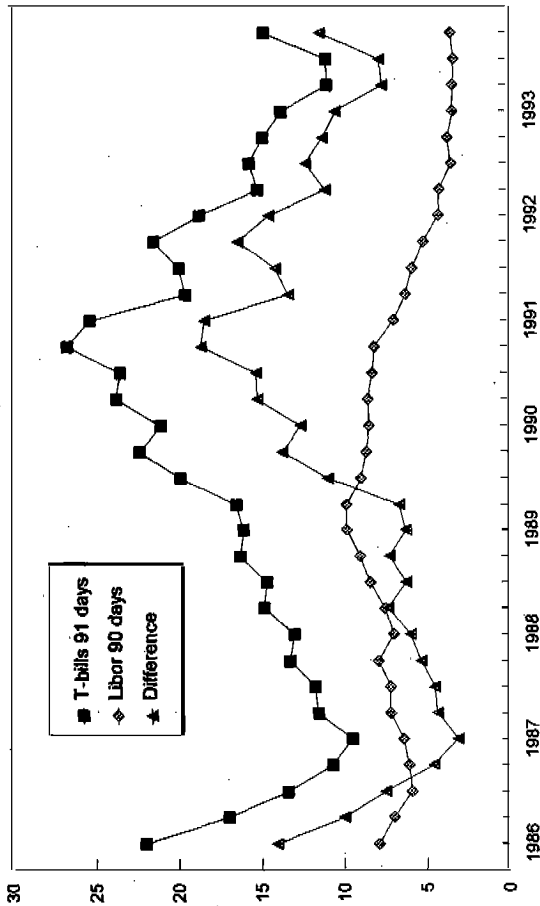
There were other factors that facilitated the surge in net portfolio investment in the last three years. One was the huge differential between domestic and foreign interest rates (Figure 1). Although the interest rate differential has been declining since 1991, it is still large by international standards, especially since the peso has been generally appreciating vis-a-vis the dollar in the most recent past.

Table 8
 NET DIRECT INVESTMENTS, NET PORTFOLIO INVESTMENTS
 AND NET NEW FOREIGN INVESTMENTS
 (In US\$ million)

	1986	1987	1988	1989	1990	1991	1992	1993	1994 (1st sem.)
Net direct									
investments	140.00	326.00	986.00	843.00	480.00	654.00	736.00	612.00	783.00
% of GNP	0.5	1.0	2.6	2.0	1.1	1.4	1.3	1.1	2.6
Net portfolio									
investments	13.00	19.00	50.00	372.00	152.00	212.00	451.00	855.00	663.00
% of GNP	0.0	0.1	0.1	0.9	0.3	0.5	0.8	1.7	2.2
Net new foreign									
investments	-18.00	24.00	7.00	-2.00	-33.00	28.00	-177.00	-772.00	-348.00
% of GNP	-0.1	-0.1	0.0	0.00	-0.1	0.1	-0.3	-1.4	-1.1

Source: Bangko Sentral ng Pilipinas.

Figure 1
INTEREST RATES
(In percent)



Source: Statistical Center, Bangko Sentral ng Pilipinas.

Another factor was the attractive rate of return on stocks. Ybañez (1992) analyzed rates of return of various financial assets during the period November 1986 - March 1992 and found that common stocks yielded the highest after-tax real rates of return in the Philippine financial markets, followed by Treasury Bills, time deposits and savings deposits in that order (Table 9).

Remittances and withdrawals of FCDU deposits. Two items in the nonmerchandise trade of the balance of payments that contributed large foreign exchange inflows into the country are remittances of Filipino overseas workers and withdrawals of foreign currency deposit unit (FCDU) deposits. Although the level of overseas workers' remittances was already high and gradually growing in absolute terms in the second half of the 1980s, it increased rapidly in 1990-1992, both in absolute terms and as a percentage of GNP (Table 10). In 1993, remittances reached US\$2.3 billion, which is equivalent to 4 percent of GNP. There were supply and demand factors that could

Table 9
REAL RATES OF RETURN (November 1986-March 1992)
(Inflation-adjusted; in percent)

Series	Monthly		Annual	
	Arithmetic mean	Standard deviation	Geometric mean	Arithmetic mean
Common stocks	1.36	12.60	0.60	21.5
Commercial-industrial	1.21	10.81	0.62	21.7
Mining	-0.31	13.13	-1.10	0.3
Oil	3.41	21.60	1.50	43.7
Treasury bills	0.27	0.63	0.27	4.1
Time deposits	0.11	0.71	0.11	2.0
Savings deposits	-0.54	0.77	-0.54	-5.6

Source: Table 3, Ybañez (1992).

Table 10
REMITTANCES AND WITHDRAWALS FROM FCDUs
(In US\$ million)

	1986	1987	1988	1989	1990	1991	1992	1993	1994 (1st sem.)
Remittances	696.00	809.00	874.00	1002.00	1203.00	1649.00	2222.00	2276.00	1269.00
% of GNP	2.4	2.5	2.3	2.4	2.7	3.6	4.1	4.0	4.2
Withdrawals of FCDU deposits	418.00	379.00	435.00	690.00	643.00	866.00	1263.00	1680.00	1432.00
% of GNP	1.4	1.2	1.2	1.6	1.4	1.9	2.3	3.0	4.7

Source: Bangko Sentral ng Pilipinas.

explain this. On the demand side, the rapid growth of the country's Asian neighbors in the 1990s created a large demand for highly skilled workers (e.g., engineers, architects and accountants) and middle-level managers. This was complemented by the opening up of nontraditional labor markets (e.g., Taiwan, Korea) for Filipino semiskilled workers. Thus, in a way, the Philippines has benefited from the rapid economic growth enjoyed by its Asian neighbors. On the supply side, the lackluster performance of the Philippine economy in the last decade has encouraged Filipino workers to look for better paying jobs abroad. It cannot be denied that recent financial innovations in banking have facilitated the transmittal of contract workers earnings through the banking system in a more efficient manner than the traditional "padala" system.

Overseas workers' remittances will likely remain high in the medium term, but are not expected to increase as dramatically as in 1990-1992 for several reasons. *First*, there are already signs that economic growth in the country's Asian neighbors is tapering off. This will reduce their demand for additional semiskilled and skilled workers and middle-level managers from other countries. *Second*, most of the country's Asian neighbors have been investing heavily in human resource development. Thus, in the near future, homegrown talents are going to replace or reduce demand for Filipino workers. And *third*, sustained growth in the Philippines expected in the medium term will likely reduce the incentives for Filipino workers to look for jobs abroad.

Withdrawals of FCDU deposits rose sharply, both in absolute terms and as a percentage of GNP, beginning in 1991, the year when foreign exchange markets deregulation begun. In 1993, these amounted to US\$1.7 billion, or 3 percent of GNP. The sources of these funds were, however, unclear. Part of them must have come from the earnings of Filipino overseas workers that were not declared as such and deposited directly in their FCDU accounts. It is to be noted that, with foreign

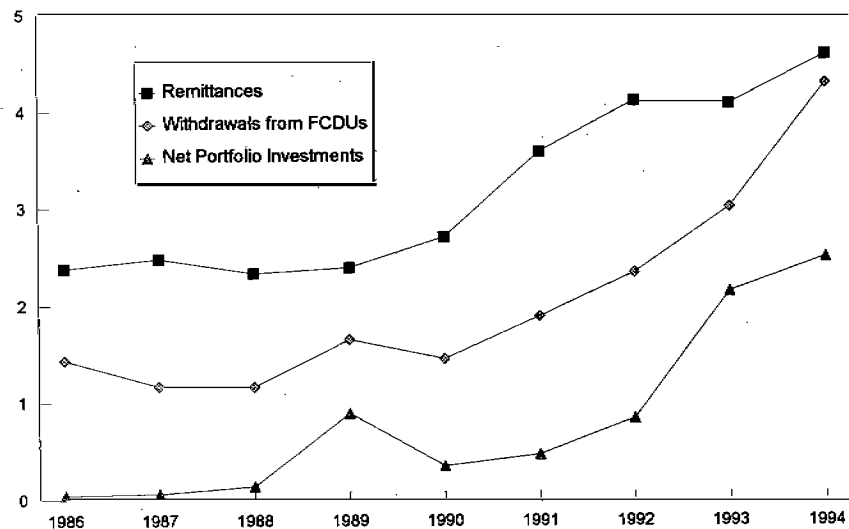
exchange deregulation, overseas workers are no longer required to remit a certain portion of their earnings to local banks. Anybody may open an FCDU account and deposit foreign currency in cash or check in such an account. Further, exporters must have started using the FCDU facility when they were no longer required to surrender their export receipts to the banking system. The other part of all these could be flight capital returning home or cash personally brought in by small foreign investors and temporarily placed in FCDU accounts. This suggests that withdrawals of FCDU deposits contain some inflows that can be reversed later when economic circumstances in the Philippines are no longer favorable either for short-term or long-term investment.

Interestingly, both workers' remittances and withdrawals of FCDU deposits are at least twice as large as the net portfolio investment (Figure 2).

Some issues. Several issues have been raised with respect to foreign exchange inflows, particularly portfolio investment. One is that these inflows are very volatile. A look at Figure 2, confirms observe that there is some truth to this, particularly in the case of withdrawals of FCDU deposits and portfolio investments. But the evidence so far seems to show that their volatility stems from the economic and political uncertainty of the country toward December 1989, rather than from external factors. This suggests that, so long as the fundamentals are right, foreign exchange inflows into the country from both portfolio investment and withdrawals of FCDU deposits will continue.

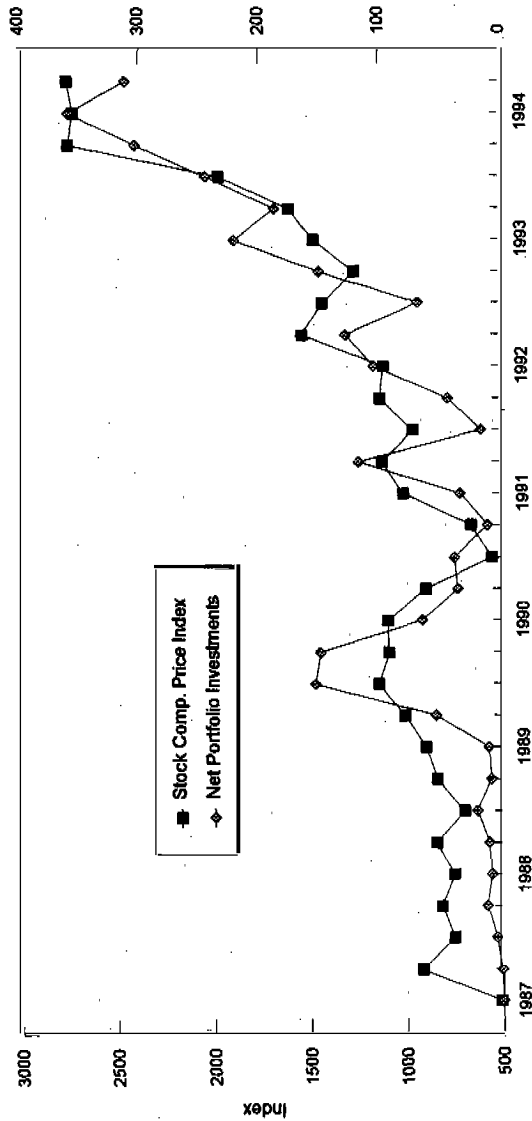
Another issue is that if portfolio investment mostly goes to the local stock market, then its sheer magnitude can swamp the shallow local stock market and cause some volatility in the stock market price. Figure 3 shows that there is a very close relationship between stock composite price index and net portfolio investments. The results of

Figure 2
REMITTANCES, WITHDRAWALS FROM FCDUs AND NET PORTFOLIO INVESTMENTS
(As percentage of GNP)



Source: Bangko Sentral ng Pilipinas.

Figure 3
STOCK COMPOSITE PRICE INDEX AND NET PORTFOLIO INVESTMENTS
(In US\$ million)



Sources: Philippine Stock Exchange Monthly Report and the Bangko Sentral ng Pilipinas.

our causality test using quarterly data for the period 1986.1-1994.2 indicate that net portfolio investment Granger affects the stock composite price index.³ In particular, 86 percent of the variation in the composite stock price index is explained by the variation in the net portfolio investment. Thus, these results confirm the hypothesis that volatility in the net portfolio investment causes volatility in the stock market price index, at least in the Philippine context. However, this should not alarm us for at least two reasons. One is that foreign investors share the risk arising from the volatility in stock market price. It is to be noted that a depression in the stock market price does not automatically translate into a loss of foreign exchange reserves unless the sale of shares of foreign investors is matched by the purchases of local residents.⁴ Another reason is that as long as the country is able to sustain growth in a stable manner, net portfolio investment will become less volatile.

An interesting issue that is perhaps worth looking into in greater detail is whether portfolio investment is productively placed. If portfolio investment is placed in existing shares of stocks, then it will result in asset inflation, adding nothing to productive investment. In

3. The F-statistics for a one-quarter lag are as follows: 5.85 (prob. = 0.02) for the null hypothesis that stock price is not Granger caused by net portfolio investment and 0.65 (prob. = 0.42) for the alternative hypothesis. Other lags were tested but showed inferior results.

4. McCarthy, a fund manager of one of the biggest Singaporean banks, put forward the following: "We may ask ourselves what happens if FPC (i.e., foreign portfolio capital) investors sell their shares and rush for the door at the same time? Could this deal a blow to the economy? Actually, we can set our minds at rest for the effect on the Philippines would be minimal. FPC funds invested in the stockmarket become a permanent part of the economy, the plant and machinery has been paid for and is perfectly safe. Funds cannot be directly withdrawn directly, instead investors must exchange their paper certificates for cash, provided they can find a counterparty. It is the investors who lose for stock prices take the strain often dropping sharply, sometimes the currency goes too and the investor gets hit both ways. But we go into the trade with both eyes wide open; perfectly aware that it is we who bear the repayment and repatriation risks" (1994, p. 7).

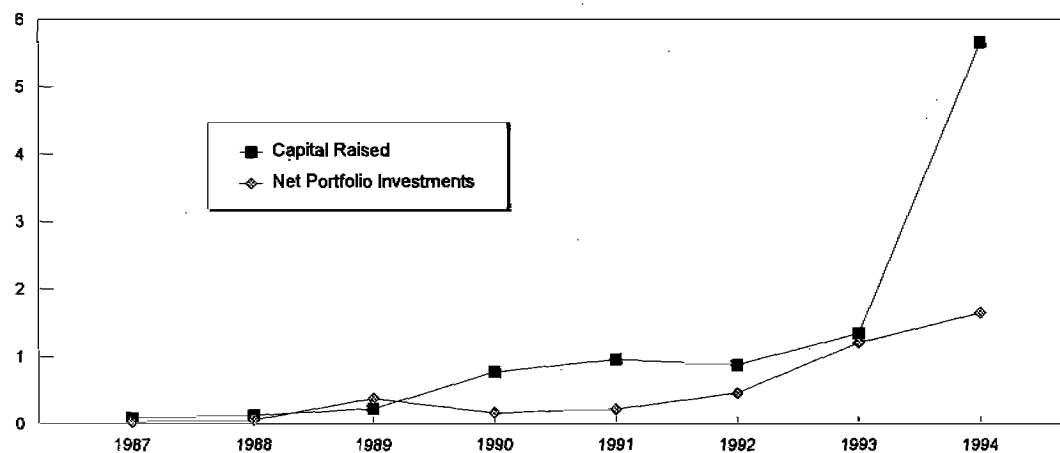
the last four years, however, the market has witnessed a number of IPOs raising large amount of capital. Capital raised in the last four years tended to increased as net portfolio investment inflows increased (Figure 4). This suggests that a significant amount of capital raised in the market came from portfolio investment inflows.

To verify whether various types of foreign exchange inflows described above have been used to increase productive investment or consumption, we have regressed gross domestic capital formation and personal consumption from the national income account series on net portfolio investment, withdrawals of FCDU deposits, remittances and deposits (savings plus time deposits). The last variable serves as a proxy for domestic savings. All variables are expressed as a percentage of nominal GNP. The results shown in Table 11 indicate that portfolio investment and domestic savings have a statistically significant positive effect on investment ratio, whereas withdrawals of FCDU deposits and remittances do not have a statistically significant effect. On the other hand, remittances have a statistically positive effect on personal consumption. Still, withdrawals of FCDU deposits do not show any significant effect on personal consumption, suggesting that this foreign exchange inflow contains the two components previously mentioned. These results have at least two policy implications. One is that the Philippines should welcome portfolio investment because it is used to expand the country's productive capacity. The other is that, while the country welcomes more remittances, it should not rely on them to finance the expansion of the country's productive capacity because they are used primarily for consumption purposes.

Responses of the Government

The surge in portfolio investments, overseas workers' remittances and withdrawals of FCDU deposits, particularly after the liberalization of the foreign exchange markets in 1991 and other reforms initiated

Figure 4
CAPITAL RAISED AND NET PORTFOLIO INVESTMENT
(In US\$ billion)



Sources: Philippine Stock Exchange Monthly Report and the Bangko Sentral ng Pilipinas.

Table 11
EFFECTS OF PORTFOLIO INVESTMENT, WITHDRAWALS FROM FCDUs,
REMITTANCES AND DOMESTIC SAVINGS ON INVESTMENT
AND PERSONAL CONSUMPTION

	Investment	Personal consumption
Constant	6.67 (1.73)***	69.11 (14.38)*
Portfolio investment	1.77 (2.41)**	0.28 (0.31)
Withdrawals from FCDU	0.42 (0.67)	-1.00 (-1.28)
Remittances	-0.96 (-1.38)	2.05 (2.35)**
Savings	0.21 (3.06)*	-0.02 (0.20)
R-Squared	0.66	0.20
D.W.	1.81	1.72
Sample period (quarterly) 1986.1 - 1994.2		

* Significant at 1% level.

** Significant at 5% level.

*** Significant at 10% level.

All variables are expressed as percentage of GNP. The equations were estimated using the Iterative Seemingly Unrelated Regressions technique.

by the government in the 1990s exerted pressure on the exchange rate to appreciate. From P28 to one US dollar in the first quarter of 1991, the peso appreciated to P25.4 in 1993. Though it was subjected to a strong speculative attack in the third quarter of 1993, it appreciated thereafter. Recently, it has shown some signs of stability at P24 to US\$1.

The government's response to the persistent nominal appreciation of the peso can be categorized into four types, namely: reducing the supply of foreign exchange inflows; increasing the

demand for foreign exchange; strengthening prudential regulations; and reducing the cost of production for exporters.

To reduce the supply of foreign exchange in the country, the government cut back on its requests for loan rescheduling under the Paris Club debt program. It is presently planning to prepay some of its foreign debt. Meanwhile, the BSP has lifted the restriction on the repatriation of foreign investments made under the debt-to-equity conversion program, as well as on the remittance of dividends, profits and earnings that are derived from such investments. It also increased the allowable outward investments that can be sourced from the banking system from US\$1 million to US\$6 million per investor per year.

To increase the demand for foreign exchange, the BSP has engaged in sterilized intervention. That is, the BSP buys dollars in the market while at the same time engaging in mopping up operations by selling government securities in its portfolio to prevent the money supply from increasing. From January 1991 to September 1994, the BSP had already bought US\$6.6 billion dollars from the market. For its part, the national government has advanced the phasedown of the forward exchange cover extended to oil firms to December 1994 to add to the demand for foreign exchange.

The BSP instituted several measures to reduce the costs of production to exporters to maintain their competitiveness. Direct and indirect exporters have been allowed access to foreign currency loans offered by FCDUs. This has afforded exporters large savings in interest payments for their loans since interest rate differentials between FCDU loans and peso-denominated loans from commercial banks range from 5.5 to 7 percentage points. The BSP rediscount rate has also been reduced from 14.3 percent in 1993 to 8.304 percent in October 1994. Recently, the BSP planned on creating a special dollar facility for exporters using part of its international reserves, with domestic commercial banks serving as lending conduits. The

lending rate in this facility will be comparable with that of FCDU loans.

To add more loanable funds to the system, the BSP gradually reduced the reserve requirement on all deposit liabilities from 24 percent in January 1993 to 17 percent in August 1994. This has contributed to the decline in domestic interest rates.

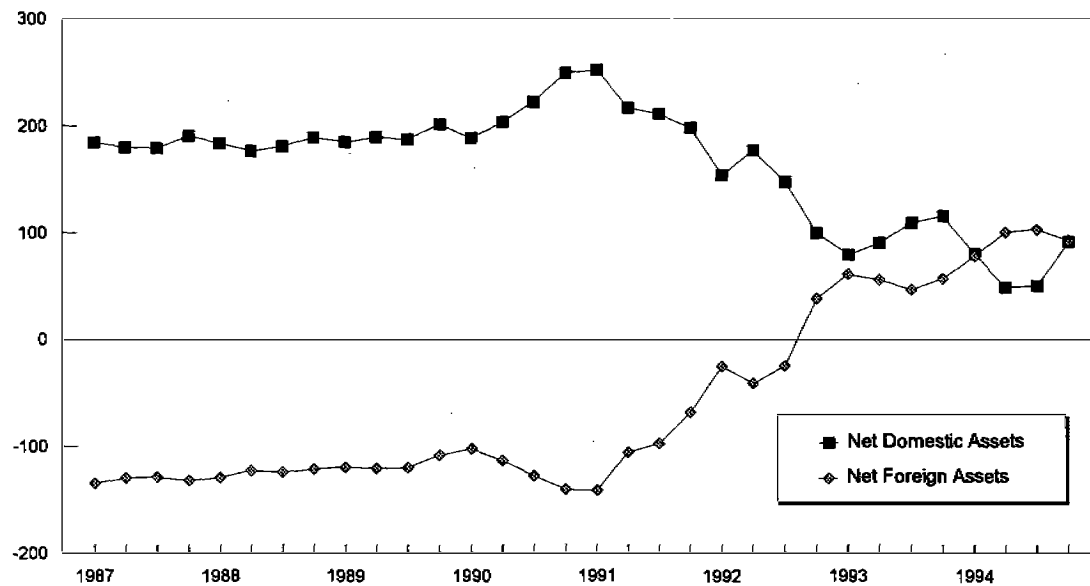
To prevent banks from unduly speculating in the foreign exchange markets, the BSP reduced the oversold position of banks from 15 percent of its unimpaired capital to 5 percent. To weed out the speculative component of portfolio investment, the BSP imposed a prior BSP approval requirement on all forward transactions with nonresidents.

Most of these measures have been implemented recently, and it may take some time for their effects to be felt in the economy. However, the measures to reduce supply and increase demand for foreign exchange would likely be less meaningful if the BSP continued to sterilize its intervention in the foreign exchange market. Figure 5 clearly shows that the BSP almost completely sterilized the monetary effects of its purchases of dollars from the market by changing net domestic assets in a direction opposite to the change in net foreign assets by almost the same amount. But is sterilization policy effective in the Philippine context?

It is well known that under a fixed exchange rate regime, a sterilization policy is less effective if the economy is more open and there is a greater degree of substitution between domestic and foreign assets. We have verified this in the case of the Philippines by estimating an offset coefficient. An offset coefficient close to -1.0 indicates a higher degree of substitution between domestic and foreign assets, which means that the BSP's sterilization policy will be ineffective. The result is shown in Table 12. The estimated offset coefficient is -0.88, which is very high and close to one.⁵ The result suggests that

5. Schadler et al.'s (1993) estimates of offset coefficients for other countries range from -0.1 to -0.7, the highest being that of Thailand.

Figure 5
CHANGE IN NET DOMESTIC ASSETS AND FOREIGN ASSETS, 1988.1—1994.2
(In P billion)



Source: Bangko Sentral ng Pilipinas.

Table 12
SCOPE FOR STERILIZATION
(Dependent variable: Net foreign assets)

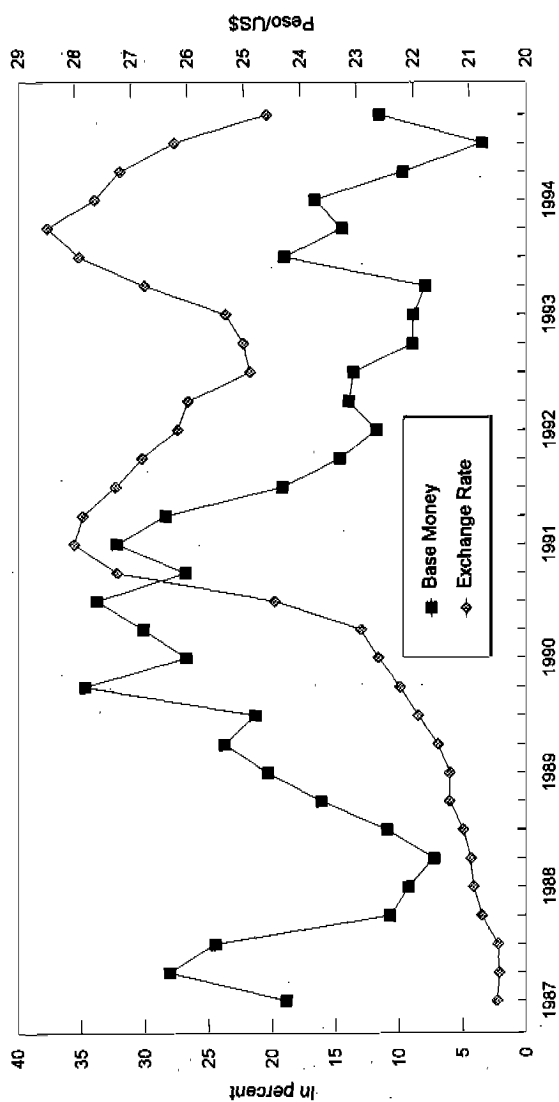
Constant	2532.97 (1.94)**
Net domestic assets	-0.88 (-14.58)*
GNP	0.19 (5.04)*
Net rate of return	-388.52 (-1.57)
Adjusted R - Squared	0.90
D.W.	1.95
Sample period (quarterly)	1988.1 - 1994.2
* Significant at 1% level.	
** Significant at 10% level.	

the sterilization policy of the BSP is less effective because any reduction in net domestic assets, which is a policy variable, induces an increase in net foreign assets by an almost equal amount.

Indeed, the sterilized intervention of the BSP failed to arrest the persistent nominal appreciation of the peso as more foreign capital flowed in to cash in on the huge differential between domestic and foreign interest rates. As Figure 6 suggests, the behavior of money supply moves closely with the exchange rate; that is, the peso appreciates if monetary policy is tightened.

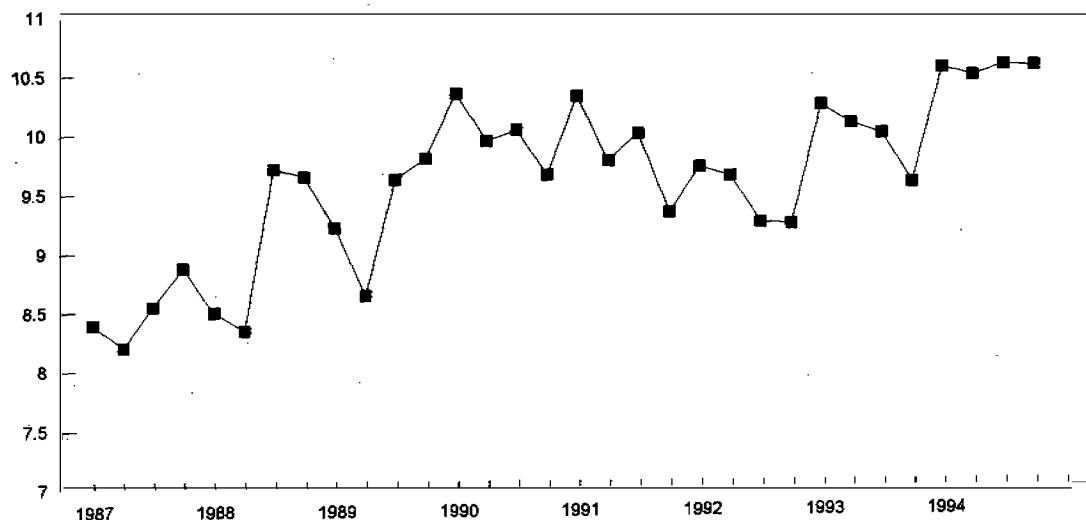
While nobody contests the need to have a prudent monetary policy, the consensus is that, it must be coordinated with fiscal policy. The fiscal sector has lately been successful in conducting a prudent fiscal policy, thus, government consumption as a ratio to GNP has been declining of late (Figure 7). Also, the consolidated public sector deficit has been contained (Figure 8). As of 14 November 1994, the

Figure 6
GROWTH RATE IN BASE MONEY AND EXCHANGE RATE



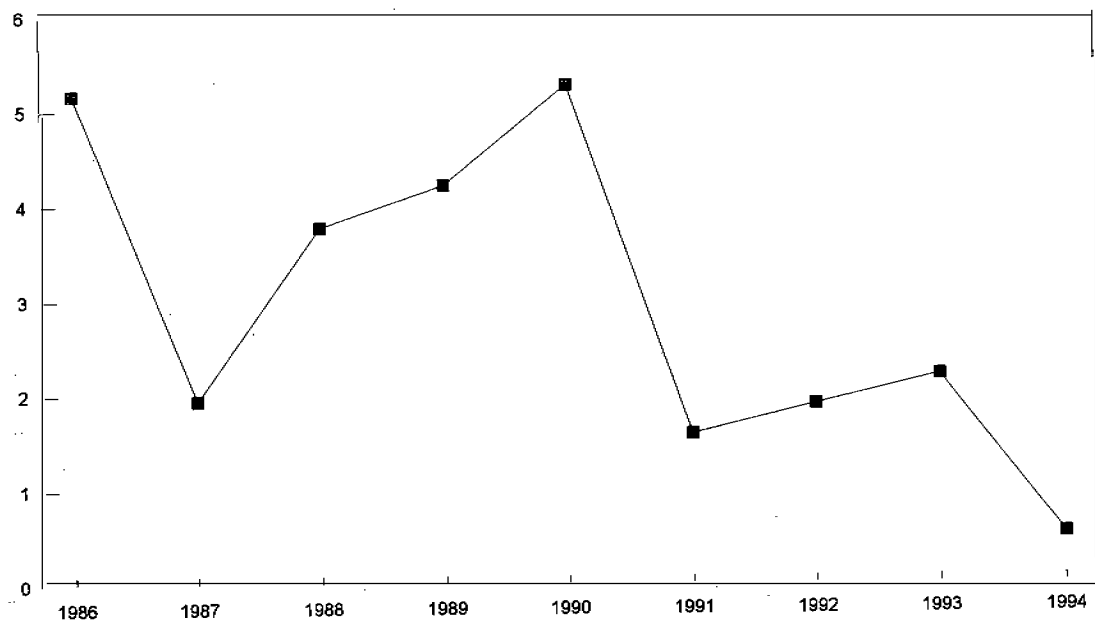
Source: Bangko Sentral ng Pilipinas.

Figure 7
GOVERNMENT CONSUMPTION
(As percentage of GNP)



Source: National Income Accounts.

Figure 8
CONSOLIDATED PUBLIC SECTOR DEFICIT
(As percentage of GNP, 1986-1994.1)



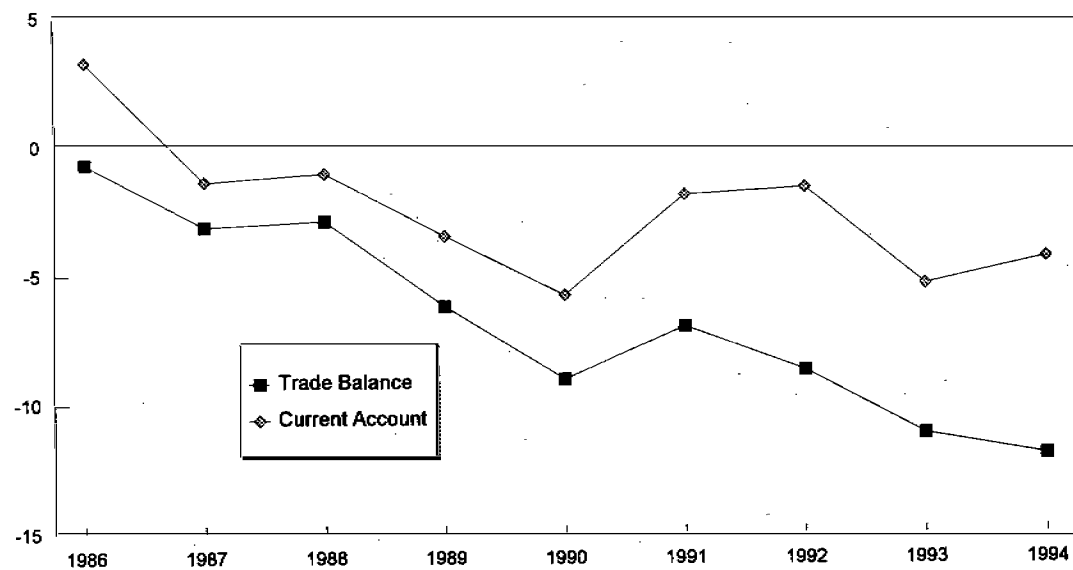
Source: Department of Finance.

national government, which was expecting a deficit of about P7 billion, had instead realized a fiscal surplus of P21.8 billion. This should have already given monetary policy some room for flexibility. On the contrary, monetary policy was even tightened further in the most recent past to meet monetary targets under the IMF stabilization program. This prevented the domestic interest rate from going down to further cut the differential between domestic and foreign interest rates. This, in turn, attracted more portfolio investment which has exerted more pressure on the peso to appreciate.

It must be borne in mind that sterilized intervention involves a huge quasi-fiscal cost. Given a difference of 5 percentage points between the domestic and international interest rates, sterilized intervention in the foreign exchange market will cost the BSP about US\$0.33 billion in 1994. Others have argued that quasi-fiscal losses from sterilization are greatly exaggerated because the Central Bank can recoup part of the interest losses from sterilization when the currency depreciates. However, under the new Central Bank Act of the Philippines, any excess profit or loss arising from the revaluation of reserves will be booked in special frozen accounts and cannot be reflected in the income statement.

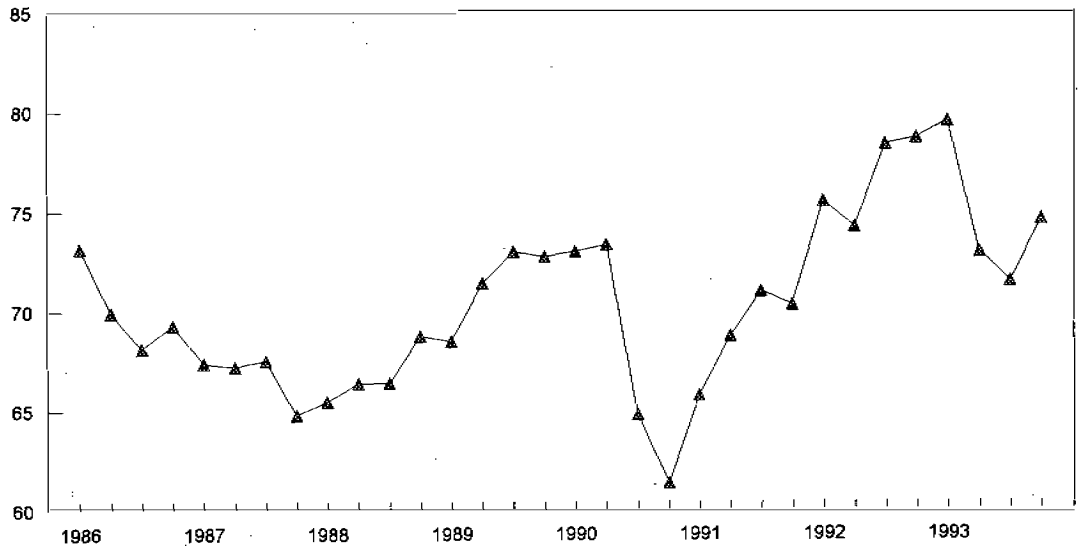
The positive point, however, is that BSP's purchases of foreign exchange allowed it to build up its gross international reserves which increased from US\$2 billion in 1990 (equivalent to 1.5 months of imports of goods and services) to US\$7.5 billion in June 1994 (equivalent to 3.5 months of imports of goods and services). However, the cost of building up those reserves could have been less had the BSP not fully sterilized its intervention in the market.

Figure 9
TRADE BALANCE AND CURRENT ACCOUNT
(As percentage of GNP)



Sources: Bangko Sentral ng Pilipinas and the National Statistical Coordination Board.

Figure 10
REAL EFFECTIVE EXCHANGE RATE
(1980 = 100)



Source: Bangko Sentral ng Pilipinas.

IV CONCLUDING REMARKS

The Philippines is currently experiencing a rapid deterioration in the balance of trade. (Figure 9). Despite this, the peso has been generally appreciating vis-a-vis the US dollar because of the large foreign exchange inflows coming from remittances, withdrawals of FCDU deposits and capital account, which more than cover the trade balance deficit. Portfolio investment inflow is likely to be sustained in the medium term so long as the economy achieves a modest, stable growth. There are strong indications that these portfolio investments will be translated into real productive investments. However, the country is, to a large extent, being denied the benefits of these inflows because of inappropriate monetary policy. Despite the recent tightening of fiscal policy, monetary policy likewise continues to be tight to meet monetary targets under the IMF-sponsored stabilization program. Indeed, the tight monetary and fiscal policies caved in on the Philippine economy, exerting pressure on the nominal exchange rate to appreciate.

Since 1991, the Philippines' real effective exchange rate has been rising (Figure 10). In contrast, Indonesia, Malaysia and Thailand, which have experienced similar surges in capital inflows, successfully avoided the appreciation of their real effective exchange rates. Clearly, the Philippines' export competitiveness is fading, with the de-industrialization of the economy becoming a real threat. Banks that have significant exposure to the export sector will soon encounter financial problems, unless the current trend is reversed.

The study, therefore, calls for a relaxation of monetary policy to accommodate the additional demand for money arising from foreign exchange inflows. Under a persistent capital inflow, it would be better for the BSP to change the monetary target from base money to net domestic assets to cash in on the capital inflows.

BIBLIOGRAPHY

- Agtmael, Antoine van. "Portfolio Investment in Emerging Markets: The View of a Practitioner." In Claessens and Gooptu (eds.) *Portfolio Investment in Developing Countries*. World Bank Discussion Paper 228. Washington, D. C.: The World Bank, 1993.
- Ahmed, Masood and Sudarshan Gooptu. "Portfolio Investment Flows to Developing Countries." *Finance and Development* 30 (1993).
- Bangko Sentral ng Pilipinas. "Primer on the Exchange Rate and on BSP Measures to Support Exports."
- Buckberg, Elaine. "Emerging Stock Markets and International Asset Pricing." In Claessens and Gooptu (eds.) *Portfolio Investment in Developing Countries*. World Bank Discussion Paper 228. Washington, D. C.: The World Bank, 1993.
- Claessens, Stijn and Sudarshan Gooptu. "Can Developing Countries Keep Foreign Capital Flowing In?" *Finance and Development* 31 (1994).
- Corbo, Vittorio and Leonardo Hernandez. "Macroeconomic Adjustment to Portfolio Capital Inflows: Rationale and Some Recent Experiences." In Claessens and Gooptu (eds.) *Portfolio Investment in Developing Countries*. World Bank Discussion Paper 228. Washington, D. C.: The World Bank, 1993.
- Davanzo, Laurence E. and Leslie B. Katz. "Toward a Global Pension Market." *Journal of Portfolio Management* (1992).
- Greenwood, John G. "Portfolio Investment in Asian and Pacific Economies: Trends and Prospects." *Asian Development Review* 11 (1993).
- Howell, Michael. "Institutional Investors and Emerging Stock Markets." In Claessens and Gooptu (eds.) *Portfolio Investment in Developing Countries*. World Bank Discussion Paper 228. Washington, D. C.: The World Bank, 1993.
- McCarthy, James. "The Stock Market as a Source of Finance." Paper presented during the 19th Annual Conference of the Federation of ASEAN Economic Associations, 8-9 December 1994, Westin Philippine Plaza, Manila.

- Mathieson, Donald J. and Liliana Rojas-Surez. "Liberalization of the Capital Account: Experiences and Issues." Occasional Paper No. 103. Washington, D.C.: International Monetary Fund, 1993.
- Schadler, Susan, Maria Carkovic, Adam Benett, and Robert Kahn. "Recent Experiences with Surges in Capital Inflows." Occasional Paper No. 108. Washington, D.C.: International Monetary Fund, 1993.
- Williamson, John. "Issues Posed by Portfolio Investment in Developing Countries." In Claessens and Gooptu (eds.) *Portfolio Investment in Developing Countries*. World Bank Discussion Paper 228. Washington, D. C.: The World Bank, 1993.
- Ybañez, Roy C. "Rates of Return on Stocks, T-Bills, and Deposits in the Philippines, 1987-1992." Paper delivered at an SGV Professorial Chair Lecture, 1992.